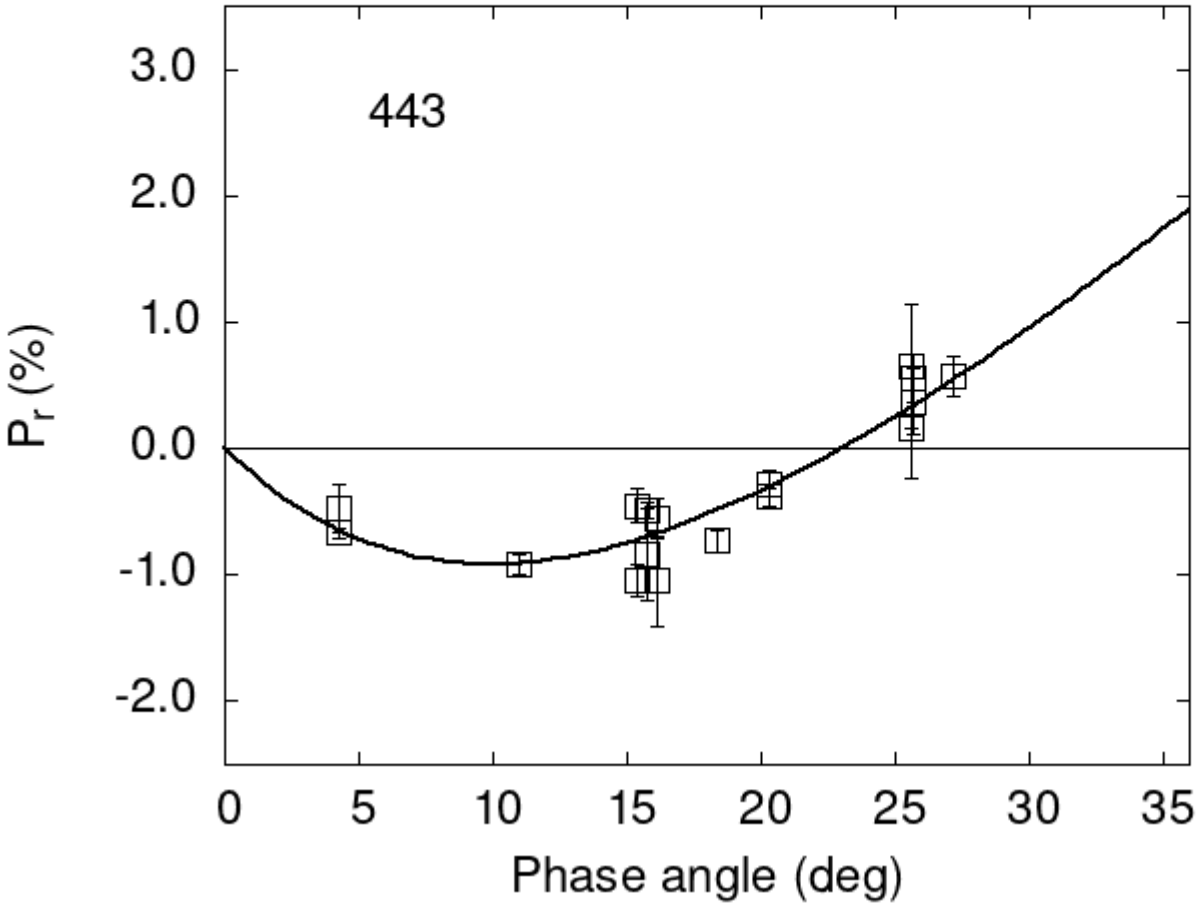
Catalogue of Asteroid Polarization Curves

Gil-Hutton (2023)



Polarimetric data:

The columns list the object number, the phase angle (degrees),P_r (%), its error, the filter used, and the reference code.

```
443 10.98 -0.92 0.08 V f
443 18.34 -0.73 0.09 V f
443 27.21  0.57 0.16 R b
443 15.76 -0.84 0.36 V b
443 15.76 -0.49 0.07 R b
443  4.25 -0.47 0.19 V b
```

```
443  4.25 -0.67 0.04 R b
443 25.71  0.37 0.26 V b
443 25.71  0.56 0.19 R b
443 25.65  0.65 0.49 V b
443 25.65  0.16 0.39 R b
443 20.34 -0.28 0.10 V b
443 20.34 -0.38 0.07 R b
443 16.14 -1.05 0.35 V b
443 16.14 -0.55 0.16 R b
443 15.39 -1.04 0.13 V b
443 15.39 -0.45 0.14 R b
```

Polarization Curve Parameters:

The polarimetric parameters were obtained fitting the observations to a polarization curve using the function:

$$P_r(\alpha) = Coe_1 \times \left[\exp\left(-\frac{\alpha}{Coe_2}\right) - 1\right] + Coe_3 \times \alpha,$$

where α is the phase angle in degrees. The minimum of the polarization curve is identified by Pmin, Phmin is the phase angle where Pmin is reached, Ph0 is the inversion angle, and k is the slope of the polarization curve at Ph0.

```
#
#      Coe1    eCoe1     Coe2    eCoe2     Coe3    eCoe3
#    5.4030   0.5660  13.4168   1.0685   0.1923   0.0156
#
#     Phmin   err   Pmin    err  Ph0    err    k      err
#      9.92  1.80 -0.916  0.367 23.04  0.33 0.1200 0.0178
```